

REMARKS

Claims 20, 21, 23, 24, 26-28, 30, 34, 37, 43-46, 48 and 49 are pending.

No new matter has been added by way of the present amendments. For instance, claims 34 and 43 have been amended to clarify the claim language. Also, claims 31, 40, 41, 42 and 47 have been cancelled. Lastly, new claim 49 has been added as supported by previously pending claim 41. Accordingly, no new matter has been added.

In view of the following remarks, Applicants respectfully request that the Examiner withdraw all rejections and allow the currently pending claims.

Objections to the Claims

At page 2 of the outstanding Office Action the Examiner has indicated that the objection to claims 42 and 43 is withdrawn and re-instated for claims 40 and 42. Applicants believe that the Examiner intends to refer to claims 40 and 41 in this rejection since these claims depend upon subsequent claims. Accordingly, claims 40 and 41 have been cancelled. New claim 49 has been added. The new claim depends upon a "prior" claim and thus avoids this objection. Reconsideration and withdrawal thereof are respectfully requested.

Issues under 35 U.S.C. §102(b)

The Examiner has rejected claims 31 and 47 under 35 U.S.C. §102(b) as being anticipated by Tibbets et al., USP 5,635,455 (hereinafter referred to as Tibbets '455). Applicants respectfully traverse.

Applicants point out that claims 31 and 47 are cancelled. Accordingly this rejection is moot. Reconsideration and withdrawal thereof are respectfully requested.

Issues under 35 U.S.C. §103(a)

The Examiner has rejected claims 20, 21, 31, 40, 42, 44 and 47 under 35 U.S.C. §103(a) as being obvious over Bunn et al., USP 5,213,961 (hereinafter referred to as Bunn '961) in view of Kaiser et al., USP 5,843,669 (hereinafter referred to as Kaiser '669). Applicants respectfully traverse.

Bunn '961 disclose a method of RT-PCR and Kaiser '669 disclose a method of PCR employing 7-Deaza-dATP and 7-Deaza-dGTP. The Examiner points out obviousness of the present invention by combining the cited references. However, there is no disclosure in either reference regarding the use of the specifically claimed nucleotide analogs in the reverse transcription step. Therefore, there exists no motivation or expectation of success for one of ordinary skill in the art to carry out the reverse transcription in

the presence of the presently claimed nucleotide analogs. Thus, there exists no *prima facie* case of obviousness.

Also, even if the Examiner has hypothetically established a *prima facie* case of obviousness, a point not conceded by Applicants, the present invention achieves unexpectedly superior results. As shown on page 12, line 13 and page 13, line 1, the inventors found that by combining two or more nucleotide analogs as defined in the claims, the combined incorporation frequency of the nucleotide analogs is not influenced by the GC content of the target RNA. This represents unexpectedly superior results which rebuts any hypothetical *prima facie* case of obviousness.

The Examiner has also rejected claims 23, 24, 26-28, 30, 34, 37, 43, 45, 46 and 48 under 35 U.S.C. 103(a) as being obvious over Bunn '961, Kaiser '669 and Fuller, USP 5,432,065 (hereinafter referred to as Fuller '065). Applicants respectfully traverse.

The Examiner asserts that Fuller '065 discloses PCR in the presence of 7-Deaza nucleotide analogs and formamide. Applicants respectfully disagree with this assertion. The Examiner refers to column 7 of Fuller '065, but apparently column 5 is more relevant. In column 5 of Fuller et al., it is described that the 5 μ l samples were mixed with 4 μ l of formamide and this solution was subjected to DNA sequencing. That is, the formamide is added after carrying out PCR. Therefore, PCR in a reaction solution containing

formamide is neither suggested nor disclosed by Fuller '065. Therefore, there exists no *prima facie* case of obviousness.

Lastly, the Examiner has rejected claims 41 and 43 under 35 U.S.C. 103(a) as being obvious over Bunn '961, Kaiser '699 and Keller, USP 5,356,796 (hereinafter referred to as Keller '796). Applicants respectfully traverse.

The Examiner refers to PCR using formamide by further citing Keller '796. However, Keller '796 fails to overcome the deficiencies of Bunn '961 and Kaiser '699 as discussed above. Thus, there exists no *prima facie* case of obviousness.


Applicants respectfully submit that the above remarks fully address and overcome the outstanding rejections and objections. For the foregoing reasons, Applicants respectfully request the Examiner to withdraw all of the outstanding rejections and objections, and to issue a Notice of Allowance indicating the patentability of the present claims.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Craig A. McRobbie (Reg. No.42,874) at the telephone number of the undersigned below.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

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